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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,001	09/30/2003	John K. Alex	POU920030134US1	5260
23334 7590 09/20/2007 FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI & BIANCO P.L. ONE BOCA COMMERCE CENTER 551 NORTHWEST 77TH STREET, SUITE 111 BOCA RATON, FL 33487			EXAMINER MIRZADEGAN, SAEED S	
			ART UNIT 2144	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,001

Applicant(s)

ALEX ET AL.

Examiner

Saeed S. Mirzadegan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/30/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 09/30/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because Fig. 2, fails to show the connection between "LAN Hub B" and "Gateway B" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "306" has been used to designate both "Operating System" in Fig. 3, and "Cluster Resource Manager" in Fig 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because in Fig. 3, both items 316 and 318 are labeled as "Network Interface Card A". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as

"amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. Applicant is required to update the status (pending, allowed, etc.) of all incorporated, related or parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

Appropriate correction is required.

6. The disclosure is objected to because of the following informalities: Page 14, Line 11 recites "Cluster Resource Manager 306". It should read "Cluster Resource Manager 304".

Appropriate correction is required.

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7. The disclosure is objected to because of the following informalities: Page 26, Line 17 recites "IP 1114 must be must to the same location". It should read, "IP 1114 must be in the same location".

Appropriate correction is required.

8. The disclosure is objected to because of the following informalities: Page 29, Line 13 recites "(ifOnline, ifOnline, ifOnNodex)". It should read, "(ifOnline, Offline, ifOnNodex)".

Appropriate correction is required.

Claim Objections

9. **Claim 13** is objected to because of the following informalities: Page 45, line 18 recites "one resource in the in the". It should read "one resource in the".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention

10. **Claims 2-6 & 8-12** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. **Claim 2** recites the limitation "an acceptable state" page 40, line 7. There is insufficient antecedent basis for this limitation in the claim. Thus Claim 2 and all its dependent claims are rejected.

12. Insofar as best understood, the claims are rejected over prior art as follows. For the sake of applying the closest prior art below, the term "an acceptable state" is being interpreted as meaning "an acceptable sub-state". If the applicant agrees with this interpretation they are invited to amend the claims to positively recite, "an acceptable sub state" or if the applicant disagrees, the applicant should present an alternate interpretation with clear arguments.

Appropriate correction is required.

13. **Claim 8** recites the limitation "the computing system" page 43, line 8. There is insufficient antecedent basis for this limitation in the claim. Thus Claim 8 and all its dependent claims are rejected.

14. Insofar as best understood, the claims are rejected over prior art as follows. For the sake of applying the closest prior art below, the term "the computing system" is being interpreted as meaning "a computing system". If the applicant agrees with this interpretation they are invited to amend the claims to positively recite, "a computing system" or if the applicant disagrees, the applicant should present an alternate interpretation with clear arguments.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

15. **Claim 7, 8-12** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Software, *per se*:

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "the sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

16. **Claims 7, 8** recite the limitation of "A computer readable medium ..." on Page 42, line 1 and Page 43 line 1. The disclosure recites "In this document, the terms "computer program medium," "computer-usable medium," "machine-readable medium"

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and "computer-readable medium" are used to generally refer to media such as program memory 302 and data memory 310, removable storage drive, a hard disk installed in hard disk drive, and signals." on page 13, lines 16-19. The disclosure further recites "Furthermore, the computer-readable medium 320 may comprise computer-readable information in a transitory state medium such as a network link and/or a network interface, including a wired network or a wireless network, that allow a computer to read such computer-readable information." On page 14, lines 7-10. The disclosure also recites, "Additionally, a computer readable medium may include volatile storage such as RAM, buffers, cache memory, and network circuits. Furthermore, the computer readable medium may include computer readable information in a transitory state medium such as a network link and/or a network interface (including a wired network or a wireless network) that allow a computer to read such computer readable information."

17. The cited portions of the specification provides intrinsic evidence that applicant intends for the phrase of computer readable medium as used in the claims to include both "storage or memory media" and "transitory state medium". A transitory state medium may include a transmission medium, e.g. signal or carrier medium, used for implementing network link, network interface, wired network or wireless network per applicant's specification in addition to anything else which would have reasonably been considered to be a transitory state medium by one of ordinary skill in the art. As such, the claim covers embodiments directed to a transitory state medium, per se. Since a transitory state medium may lack the necessary physical articles or objects necessary

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for it to be a machine or a manufacture within the meaning of 35 USC 101, and it's clearly not a series of steps or acts so as to be a process or combination of two or more substances so as to be a composition of matter, it fails to fall within a statutory category. Since the claim is not limited to embodiments eligible for patent protection, it is being rejected as non-statutory. Thus Claim 7 and Claim 8 and its dependents (Claims 9-12) are rejected. For the purpose of applying prior art, claims 7-12 are read as "A computer-readable medium as per a storage media comprising..."

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

18. **Claims 1, 2, 5-8, 11, 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Eshghi et al. (US Patent No. 5893083) hereafter "Eshghi".

19. Regarding **Claim 1**, Eshghi discloses, determining that a desired end state for an autonomic computing system can be reached using conditional relationship specifications (**Col. 1, lines 30-36, teaches whether the requirements and goals are met for a service based on the relationship between the services**); and placing the autonomic computing system in the desired end state (**Col. 1, line 30-36 specifying the task to be performed to make the service available**).

20. Regarding **Claim 2**, Eshghi discloses, determining that a desired end state for an autonomic computing system cannot be reached (**Col. 1, lines 30-36) teaches whether the requirements and goals are met for a service based on the relationship between the services**; determining that an acceptable sub-state can be reached (**Col. 3, lines 56-60) teaches determining whether a sub-goal is satisfied** using at least one of priority ratings, conditional relationship specifications, and alternative relationship specifications (**Col. 1, lines 30-36) teaches relationship between the services**; and placing the autonomic computing system in an acceptable state (**Col. 4, lines 1-6) teaches performing operations to satisfy the sub-goal requirements**.

21. Regarding **Claim 5**, Eshghi discloses, the conditional relationship specifications comprise policy definitions that are applied when the state of a specified resource meets a predetermined requirement (**Col. 2, lines 53-57) The requirements are set out in terms of the required entities and their relationships to the declarative model for specifying requirements which must be met for the service to be available**.

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22. Regarding **Claim 6**, Eshghi discloses, the alternative relationship specifications comprise at least one of policy definitions, and conditional relationship specifications, that are applied when the state of a specified resource does not meet a predetermined requirement (**Col. 3, lines 56-60& Col. 4, lines 1-6**) **The inference engine determines that a sub-goal is no longer satisfied and seeks the operations which utilizes the operation (alternative relationship specifications) that will enable the sub-goal to be re-satisfied, the operation is based upon relationships between the services.**

23. **Claim 7**, lists all the same elements of claim 1, but in a computer readable medium form rather than method form. Therefore, the supporting rationale of the rejection to claim 1 applies equally as well to claim 7.

24. **Claim 8**, lists all the same elements of claim 2, but in a computer readable medium form rather than method form. Therefore, the supporting rationale of the rejection to claim 2 applies equally as well to claim 8.

25. **Claim 11**, lists all the same elements of claim 5, but in a computer readable medium form rather than method form. Therefore, the supporting rationale of the rejection to claim 5 applies equally as well to claim 11.

26. **Claim 12**, lists all the same elements of claim 6, but in a computer readable medium form rather than method form. Therefore, the supporting rationale of the rejection to claim 6 applies equally as well to claim 12.

Claim Rejections - 35 USC § 102

27. **Claims 13-15** are rejected under 35 U.S.C. 102(e) as being anticipated by Sankaranarayan et al. (US PG Pub. No.2005/0033846) hereafter "Sankaranarayan".

28. Regarding **Claim 13**, Sankaranarayan discloses, memory for storing at least one policy definition (**Fig. 1, 28**); a resource monitor (**¶0010**) **resource manager**, communicatively coupled with each resource in the autonomic computing system, for monitoring, and communicating data with, each resource in the autonomic computing system (**¶0010**) **resources are interfaced with the resource manager which monitors the resources**; an equivalency definer, communicatively coupled with each resource in the autonomic computing system, and with the memory, for defining at least one equivalency representing at least one set of equivalent resources in the autonomic computing system, and storing the at least one equivalency in the memory (**Page 4, ¶0079, lines 1-3**) **a resource quantifier 106 that determines the amount of resource available for allocation by the resource manager 102 which maintains this information**; a policy generator, communicatively coupled with the resource monitor and the memory, for providing in the memory a representation of a system-wide graph of available actions and at least one of: priority ratings, conditional relationship

specifications, and alternative relationship specifications, corresponding with resources in the autonomic computing system (**Fig. 5, table 500 & page 6, ¶0011, lines 1-3**) a **policy manager which sets various policies which are maintained by the resource manager**; and an automation engine, communicatively coupled with the resource monitor, with at least one resource in the autonomic computing system, and with the memory, for providing available actions to the at least one resource in the in the autonomic computing system in order for the autonomic computing system to establish and maintain a desired end state(**Fig. 18, 1810 & ¶0208, lines 1-5**) the **dispatch engine after receiving the activity event notifications from the resource manager dispatches further actions to be performed to satisfy the requirements.**

29. Regarding **Claim 14**, Sankaranarayan discloses the autonomic resource manager of claim 13. Sankaranarayan further discloses a resource harvester, communicatively coupled with each resource in an autonomic computing system, with the resource monitor, with the equivalency definer, with the policy generator, and with the memory, for specifying underlying relationships between resources in the autonomic computing system via self discovery (**Page 2, ¶0019 & Page 3, ¶0050**) even though **the resource consumer does not know what resources it requires, the intelligent interface component determines which resources are needed (self discovery) and informs the resource manager to generate the rules accordingly.**

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30. Regarding **Claim 15**, Sankaranarayan discloses the autonomic resource manager of claim 13. Sankaranarayan further discloses the priority ratings comprise an attribute assigned to a policy definition that determines a sequence for applying the policy definition (**Fig. 5, table 500**) **Priority rating values**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

31. **Claims 3, 4, 9, 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Eshghi in view of Sankaranarayan.

32. Regarding **Claim 3** Eshghi discloses the invention substantially as claimed. However, Eshghi does not explicitly teach: the priority ratings comprise an attribute

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assigned to a policy definition that determines at least one of a selection of conflicting policy definitions and a sequence for applying the policy definitions.

33. In the same field of endeavor, Sankaranarayan teaches, **(Page 1, ¶0011, lines 3-6 & ¶0013, lines 7-11) priority based policy and conflict determination and resolution.**

34. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Sankaranarayan's teachings as explained above with the teachings of Eshghi, for the purpose of **(see Sankaranarayan, ¶ 0008)** fulfilling the greater need, generated due to growing need for resources, for techniques to manage and allocate the limited resources. Eshghi provides motivation to do so, by providing a method and apparatus, which exploits automatic initiation of management tasks to facilitate the management of large networks **(see Eshghi, Col.2, lines 22-26).**

35. Regarding **Claim 4** Eshghi discloses the invention substantially as claimed. However, Eshghi does not explicitly teach: the attribute assigned to the policy definition is one of the following: mandatory, a numerical value, and not required.

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36. In the same field of endeavor, Sankaranarayan teaches, (**¶0013, lines 7-11**) **needed resource is secured by forcing the current user to release the resource thereby making it mandatory.**

37. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Sankaranarayan's teachings as explained above with the teachings of Eshghi, for the purpose of (**see Sankaranarayan, ¶ 0008**) fulfilling the greater need, generated due to growing need for resources, for techniques to manage and allocate the limited resources. Eshghi provides motivation to do so, by providing a method and apparatus, which exploits automatic initiation of management tasks to facilitate the management of large networks (**see Eshghi, Col.2, lines 22-26**).

38. **Claim 9**, lists all the same elements of claim 3, but in a computer readable medium form rather than method form. Therefore, the supporting rationale of the rejection to claim 3 applies equally as well to claim 9.

39. **Claim 10**, lists all the same elements of claim 4, but in a computer readable medium form rather than method form. Therefore, the supporting rationale of the rejection to claim 4 applies equally as well to claim 10.

Claim Rejections - 35 USC § 103

40. **Claims 16-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sankaranarayan in view of Eshghi.

41. Regarding **Claim 16**, Sankaranarayan substantially discloses the elements of claim 13. However, Sankaranarayan does not explicitly teach: the conditional relationship specifications comprise policy definitions that are applied if the state of a specified resource meets a predetermined requirement.

42. In the same field of endeavor, Eshghi teaches, **(Col. 2, lines 53-57) The requirements are set out in terms of the required entities and their relationships to the declarative model for specifying requirements which must be met for the service to be available.**

43. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Eshghi's teachings as explained above with the teachings of Sankaranarayan, for the purpose of **(see Eshghi, Col.2, lines 22-26)** facilitating the management of large networks with a method and apparatus, which exploits automatic initiation of management tasks. Sankaranarayan provides motivation to do so, by fulfilling the greater need, generated due to growing need for resources, for techniques to manage and allocate the limited resources **(see Sankaranarayan, ¶ 0008).**

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44. Regarding **Claim 17**, Sankaranarayan substantially discloses the elements of claim 13. However, Sankaranarayan does not explicitly teach: the alternative relationship specifications comprise at least one of policy definitions and conditional relationship specifications that are applied when the complete desired end state of the system cannot be met.

45. In the same field of endeavor, Eshghi teaches, **(Col. 3, lines 56-60& Col. 4, lines 1-6) The inference engine determines that a sub-goal is no longer satisfied and seeks the operations which utilizes the operation (alternative relationship specifications) that will enable the sub-goal to be re-satisfied, the operation is based upon relationships between the services.**

46. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Eshghi's teachings as explained above with the teachings of Sankaranarayan, for the purpose of **(see Eshghi, Col.2, lines 22-26) facilitating the management of large networks with a method and apparatus, which exploits automatic initiation of management tasks. Sankaranarayan provides motivation to do so, by fulfilling the greater need, generated due to growing need for resources, for techniques to manage and allocate the limited resources (see Sankaranarayan, ¶ 0008).**

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47. Regarding **Claim 18**, Sankaranarayan substantially discloses the elements of claim 13. Sankaranarayan further discloses (**Page 5, ¶0082, lines 1-3**) **distributed resources**. However, Sankaranarayan does not explicitly teach: the alternative relationship specifications comprise at least one of policy definitions and conditional relationship specifications that are applied when the complete desired end state of the system cannot be met.

48. In the same field of endeavor, Eshghi teaches, determining that a desired end state for an autonomic computing system cannot be reached (**Col. 1, lines 30-36**) **teaches whether the requirements and goals are met for a service based on the relationship between the services**; determining that an acceptable sub-state can be reached (**Col. 3, lines 56-60**) **teaches determining whether a sub-goal is satisfied** using at least one of priority ratings, conditional relationship specifications, and alternative relationship specifications (**Col. 1, lines 30-36**) **teaches relationship between the services**; and placing the autonomic computing system in an acceptable state (**Col. 4, lines 1-6**) **teaches performing operations to satisfy the sub-goal requirements**.

49. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Eshghi's teachings as explained above with the teachings of Sankaranarayan, for the purpose of (**see Eshghi, Col.2, lines 22-26**) facilitating the management of large networks with a method and

apparatus, which exploits automatic initiation of management tasks. Sankaranarayan provides motivation to do so, by fulfilling the greater need, generated due to growing need for resources, for techniques to manage and allocate the limited resources (**see Sankaranarayan, ¶ 0008**).

50. Regarding **Claim 19**, Sankaranarayan-Eshghi discloses the invention substantially as claimed. Sankaranarayan further discloses (**Page 5, ¶0082, lines 1-3 distributed resources**). Sankaranarayan also discloses (**Page 1, ¶0011, lines 3-6 & ¶0013, lines 7-11) priority based policy and conflict determination and resolution**.

51. Regarding **Claim 20**, Sankaranarayan-Eshghi substantially discloses the elements of claim 18. However, Sankaranarayan does not explicitly teach: the conditional relationship specifications comprise policy definitions that are applied if the state of a specified resource meets a predetermined requirement.

52. In the same field of endeavor, Eshghi teaches, (**Col. 2, lines 53-57) The requirements are set out in terms of the required entities and their relationships to the declarative model for specifying requirements which must be met for the service to be available**.

53. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Eshghi's teachings as explained

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above with the teachings of Sankaranarayan, for the purpose of **(see Eshghi, Col.2, lines 22-26)** facilitating the management of large networks with a method and apparatus, which exploits automatic initiation of management tasks. Sankaranarayan provides motivation to do so, by fulfilling the greater need, generated due to growing need for resources, for techniques to manage and allocate the limited resources **(see Sankaranarayan, ¶ 0008)**.

54. Regarding **Claim 21**, Sankaranarayan-Eshghi substantially discloses the elements of claim 18. However, Sankaranarayan does not explicitly teach: the alternative relationship specifications comprise at least one of policy definitions and conditional relationship specifications that are applied when the complete desired end state of the system cannot be met.

55. In the same field of endeavor, Eshghi teaches, **(Col. 3, lines 56-60& Col. 4, lines 1-6) The inference engine determines that a sub-goal is no longer satisfied and seeks the operations which utilizes the operation (alternative relationship specifications) that will enable the sub-goal to be re-satisfied, the operation is based upon relationships between the services.**

56. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Eshghi's teachings as explained above with the teachings of Sankaranarayan, for the purpose of **(see Eshghi, Col.2,**

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lines 22-26) facilitating the management of large networks with a method and apparatus, which exploits automatic initiation of management tasks. Sankaranarayan provides motivation to do so, by fulfilling the greater need, generated due to growing need for resources, for techniques to manage and allocate the limited resources (**see Sankaranarayan, ¶ 0008**).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

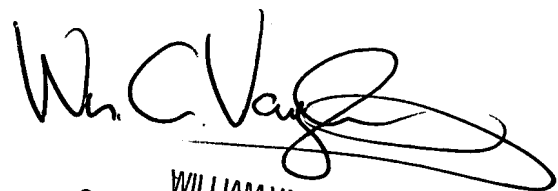
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed S. Mirzadegan whose telephone number is 571-270-3044. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SSM

A handwritten signature in black ink, appearing to read 'Wm. C. Vaughn', with a large, stylized flourish at the end.

WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100